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An engineer's rules for running a business

31 May 2018



Peter Ho sold everything he had to make his business a success; 10 rules guide his thinking

On a lobby wall of Singapore engineering firm HOPE Technik are 10 company rules that set the organisational tone. Co-founder and CEO **Peter Ho** describes them as “very personal”, none perhaps more so than the first two:

- 1. It is a passion and a career, not a job.*
- 2. We are engineering commandos. Small in number, strong in force.*

That the 10-year-old company – it was founded in May 2008 – is an engineering commando unit is an acknowledged industry fact: it has delivered solutions in space travel, unmanned aerial vehicles, and advanced robotics in various industries. To many of Ho’s countrymen, the company is perhaps best known for the Red Rhino fire truck which headlines its TRIGEN Automotive line of special function vehicles. And for Ho, HOPE Technik is the culmination of a passion for engineering.

“I’m just fortunate that the gamble back then paid off,” reflects Ho on the decision to start the company with three friends and the ensuing struggle to make a success of HOPE Technik, racking up a reported S\$40,000 in credit card debt – “I think the numbers are much higher” – that forced the car aficionado to “sell everything I had”.

“I even sold all my remote control cars,” he tells *Perspectives@SMU* at the HOPE Technik building in an industrial estate in western Singapore. “I sold my car magazines and comics I’d

kept since 1993 for 80 bucks. Whatever I could sell, I sold. It helped pay the credit card bills, didn't it?

“If you want to do something, you might as well sacrifice everything to get it done. You say you want to do something, then do it. Do it until it hurts so badly, and then do it a bit more. I'm not trying to sound macho or anything, but that's what's needed.”

MANAGING PEOPLE

- 3. We believe in doing things right, never take the easiest or most common way.*
- 4. Focus on the goal, enjoy the process.*
- 5. Our best intentions and ideas are put into production, and if there are problems no blame goes to anyone, we will all fix it.*

That credo of full commitment served Ho well at Team Petronas Touring Cars in his first job post-graduation from the National University of Singapore. The mechanical engineering graduate “went round the world racing”, mixing passion with work. But it was also, in his own words, “a baptism of fire” managing a team of 24 people, cajoling and pushing them in turn to restore a “wrecked car” to race shape in 72 hours “because it's contractually required by the sponsors”.

“It was communicating and making sure everyone sees the big picture of why they were doing what they were doing,” Ho explains his role as Chief Engineer. “You either get the job done or you're fired within a day. The weeding out process was much easier compared to standard contracts. But we never had to push anybody out.”

Was it because everyone on the team was passionate, as Ho was and still is, about cars?

“Passion is fun until you haven't slept for four days,” he deadpans. “Then it's a matter of whether the people involved feel ownership of what they were doing. There were little nuances of action that let people know whether they felt wanted – that's the tricky part. The devil is in the detail.”

THE ENGINEER BOSS

- 6. There must be a minimum number of reports required, but important work must be recorded.*
- 7. We do not reinvent the wheel, we adapt and modify proven solutions to give reliable results.*
- 8. We test the project's operation and functionality at each and all stages.*

But as the company grows beyond 100 staff (Ho never uses ‘staff’ or ‘employees’ throughout the interview; ‘team mates’ are his preferred term of reference) the job of managing an expanding portfolio becomes ever more difficult. In Ho's chosen industry of advanced manufacturing and robotics, it also involves things that are not just ‘complicated’ but ‘complex’.

“I think ‘complicated’ is less defensible,” Ho explains. “Complicated is when you have a lot of stuff involved and you have to figure out how A connects to B and how B connects to C. It’s a bit frightening because with 3D printing and robots of the future etc., ‘complicated’ can be mimicked and replicated fairly consistently on any level.

“Complex is about going into things that are multidisciplinary that don’t go $A+B+C=D$. Biological things are obviously complex. But if you take a step back, it could be things like regulatory, it could include things like design, marketing, those are complex. Look at iPhones. Are they complicated? Yes. Is Apple selling it based on complicated? No. They are selling it based on complex, the marketing and the design.”

In an age where technological disruptions are constant and value creation is crucial but expensive, Ho believes companies need to do what he calls a ‘double jump’ – something different from what everyone else is doing. But can HOPE Technik do that? And is an IPO necessary to vault the company into the big league?

“I don’t think so,” Ho asserts. “I think whether we become a publically listed company or stay as a private company or whatever we want it to be, I think the most important thing is: what is the use of cash? Do we have enough cash and do we know how to deploy it? If we have enough cash and we are profitable, and it’s enough to fulfill our strategy, then there’s no point in dilution, which is what an IPO is.

“I have a lot of friends who listed their companies. All of them share candid stories of [struggles with expectations over] share price. Sometime if you want to do a double jump, you sacrifice the short-term bottom line. The problem is it becomes very difficult when people just look at, ‘Were you profitable this quarter?’”

So what is the company vision? “It’s very simple: That we are able to take ideas and demands and actually deliver working solutions. And we’ll take those areas of focus, for example the current business units that we have, and enable them to become companies on their own. We want to let people within the companies rise to that level, and it’s theirs to own and run.”

HOPE (TECHNIK) FOR TOMORROW

9. We learn from yesterday, live for today, hope for tomorrow. Always never stop questioning.

10. We respect ourselves, our colleagues, our vendors and our clients.

With a drink in his hand, Ho readily admits relishing in leading the team with his co-founders despite stress that has “gone through the ceiling” as the company has blossomed from a dream that started with four friends making a promise to create success “till bankruptcy do us part”. The 40-year-old cherishes the company atmosphere the co-founders have created, where “the ability to just ask teammates and get a frank opinion that ‘it’s a stupid idea’ or ‘you really didn’t think this through’ is a good thing”.

What happens when Peter Ho and the co-founders leave the company or pass on? What happens to the anyone-can-talk-to-anyone-over-a-beer culture that has served HOPE Technik so well in the last decade? What about the 10 rules?

“As much as we paint them on our front wall, whether or not in the future they’re going to be...” Ho trails off before stating emphatically, “These 10 rules are all very personal. You look at one of the tough ones. Rule number 10 is always a tricky one. It’s about respect. It’s such a simple rule, but to actually practice it is bloody difficult.

“To respect your team mates when the s--- hits the ceiling, when people are tired and stressed, when you are behind schedule etc. Will the current culture continue when the founders are no longer at the helm? I don’t know.

“Hopefully whomever we choose to continue the business and can take the leadership on will be properly selected. That’s all I can hope for.”

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